

STATEMENT OF BASIS

Taylor Wharton

Theodore, Alabama

Mobile County

503-0007

This proposed Title V Major Source Operating Permit renewal is issued under the provisions of ADEM Admin. Code R. 335-3-16. The above named applicant has requested authorization to perform the work or operate the facility shown on the application and drawings, plans and other documents attached hereto or on file with the Air Division of the Alabama Department of Environmental Management, in accordance with the terms and conditions of this permit.

Taylor Wharton was issued its existing Major Source Operating Permit (MSOP) on April 19, 2005, with an expiration date of January 3, 2010. Per ADEM Rule 335-3-16-.12(2), an application for permit renewal shall be submitted at least six (6) months, but not more than eighteen (18) months, before the date of expiration of the permit. Based on this rule, the application for renewal was due to the Department no later than July 3, 2009, but no earlier than July 3, 2008. An application for permit renewal was received by the Department on July 7, 2009, but it was postmarked prior to July 3, 2009. Based on this the Department considers this to be a timely application. Additional information was received on December 16, 2009. The proposed MSOP will expire in January 3, 2015.

Taylor-Wharton is engaged in the manufacturing of portable bulk gas and liquid cylinders. Incoming metal components for the manufacturing of portable vessels are degreased in one of two (2) vapor degreasers. The gas cylinders are then assembled and welded into a unit, painted, and packaged. Liquid cylinders are assembled and welded into a unit, cleaned, polished, tested, and packaged. Incoming metal components for the manufacturing of bulk cylinders are conveyed to metal working operations which include cutting, forming, welding, etc. The components are then conveyed to abrasive blasting operations to remove rust and scale or roughening the surface in preparation for painting. Blasted components are then assembled. Once assembled the unit is tested, painted in one of five (5) paint booths and stored.

Based on the Title V Permit application Taylor-Wharton is a major source for volatile organic compounds (VOC), single Hazardous Air Pollutant (HAP), Xylene, and total HAPs.

The significant sources of air pollutants at the facility are:

- Two (2) Vapor Degreasers
- Five (5) Surface Coating Operations
 - RDF Surface Coating Booth
 - Small Tank Prime/Finish Booth
 - High Bay Surface Coating Booth
 - Outside Tank Surface Coating Operation
 - Repair Shop Surface Coating Booth
- Wheelabrator Shot Blast Booth

Insignificant Activity

- Two (2) Natural Gas Boilers

Two (2) Vapor Degreasers

Taylor Wharton uses the two (2) vapor degreasers to degrease incoming metal components for the manufacturing of the portable vessels. There is also a metal cleaning operation that is done by hand. This operation uses Ethanol to clean the metal components.

40 CFR 63 Subpart T “National Emissions Standards for Halogenated Solvent Cleaning” applies to any batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses any solvent containing methylene, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride or chloroform, or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent. The degreasers currently use n-Propyl Bromide a non HAP instead of TCE as the solvent for cleaning the metal. The facility has not used TCE since 2008. Taylor Wharton no longer uses any solvents listed in §63.460(a). Therefore, the facility is no longer subject to 40 CFR Subpart T, and the requirements of 40 CFR 63 Subpart T will be removed from Taylor Wharton’s MSOP.

Emissions Standards:

The degreasers are not subject to any emissions standards other than those listed in the general provisos.

Expected Emissions:

Degreaser # 1 and Degreaser # 2

VOC:

The expected VOC emissions are 19.7 lbs/hr (19.7 TPY) based on actual n-Propyl Bromide usage and material balance.

Surface Coating Preparation (Cleaning)

VOC:

The expected VOC emissions are 2.33 lbs/hr (1.19 TPY) based on actual Ethanol usage and material balance.

Periodic Monitoring, Recordkeeping, and Reporting

These units are not subject to any emissions standards and do not require add-on controls. Therefore the degreasers are not subject to any additional monitoring or recordkeeping and reporting requirements other than those listed in the general provisos.

RDF Surface Coating Booth (EP – RDF)

Taylor Wharton uses the RDF Surface Coating Booth for surface preparation and finish painting of small portable tanks' prior to packaging. This unit is subject to 40 CFR 63 Subpart M "National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products".

Emission Standards:

The facility shall limit organic HAP emissions to no more than 0.31 kg (2.6 lb) organic HAPs per liter (gal) coating solids used during each 12 month compliance period.

40 CFR 63 Subpart M, §63.3890(b)(1)

Expected Emissions:

VOC:

The expected VOC emissions are 1.66 lbs/hr (0.85 TPY). This is based on mass balance and the maximum expected application of 431 gallons of paint and 51 gallons of cleanup solvent during any consecutive twelve (12) month period.

Particulate Matter (PM):

The expected PM emissions are 0.167 lbs/hr (0.05 TPY). This is based on mass balance, 95% particulate filter efficiency, and the maximum expected application of 431 gallons of paint during any consecutive twelve (12) month period.

HAP:

The expected HAP emissions are based on mass balance and the maximum expected application of 431 gallons of paint during any consecutive twelve (12) month period.

Pollutant	Emission Rate	Emission Rate
	lb/hr	TPY
Hexane	0.006	0.003
Toluene	0.009	0.005
Xylene	0.35	0.18
Ethylbenzene	0.11	0.05
MIBK	0.005	0.002
Total	0.48	0.24

Periodic Monitoring:

The filter system associated with this source shall be inspected at least on an annual basis to ensure maintenance is performed in such a manner as to minimize the emissions of particulate matter.

ADEM Admin. Code R. 335-3-16-.05(c)

Recordkeeping and Reporting:

Records of the required filter inspections, along with records of any maintenance performed on the filter(s) shall be kept in a form suitable for inspection for at least five years following the date of generation of the record.

ADEM Admin. Code R. 335-3-16-.05(c)

This source is subject to the applicable requirements of 40 CFR Part 63 Subpart MMMM, “National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products” to include the recordkeeping and reporting in §63.3920(a), §63.3930(a-e), §63.3931(a & b), and §63.3942(b & c).

40 CFR 63 Subpart MMMM, §63.3920, §63.3930, §63.3931, and §63.3942(b & c)

The permittee shall submit semiannual compliance reports for each affected source according to the requirements of 40 CFR 63.3920.

40 CFR 63 Subpart MMMM §63.3920

The records from the facility operation must be in a form suitable and readily available for expeditious review. Where appropriate, the records may be maintained as electronic spreadsheets or as a database. The records must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

40 CFR 63 Subpart MMMM §63.3931

CAM:

This operation does not have pre-controlled potential emissions greater than any major source threshold; therefore, CAM does not apply.

Small Tank Prime/Finish Booth (EP – STPF)

Taylor Wharton uses the small tank prime/finish booth to prime, paint, and finish painting of fabricated small portable storage tanks prior to storage. This unit is subject to 40 CFR 63 Subpart MMMM “National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products”.

Emission Standards:

The facility shall limit organic HAP emissions to no more than 0.31 kg (2.6 lb) organic HAPs per liter (gal) coating solids used during each 12 month compliance period.

40 CFR 63 Subpart MMMM, §63.3890(b)(1)

Expected Emissions:

VOC:

The expected VOC emissions are 7.07 lbs/hr (3.61 TPY). This is based on mass balance and the maximum expected application of 1840 gallons of paint and 218 gallons of cleanup solvent during any consecutive twelve (12) month period.

Particulate Matter (PM):

The expected PM emissions are 0.711 lbs/hr (0.19 TPY). This is based on mass balance, 95% particulate filter efficiency, and the maximum expected application of 1840 gallons of paint during any consecutive twelve (12) month period.

HAP:

The expected HAP emissions are based on mass balance and the maximum expected application of 1840 gallons of paint during any consecutive twelve (12) month period.

Pollutant	Emission Rate	Emission Rate
	lb/hr	TPY
Hexane	0.03	0.01
Toluene	0.04	0.02
Xylene	1.48	0.76
Ethylbenzene	0.46	0.23
MIBK	0.02	0.01
Total	2.03	1.03

Periodic Monitoring:

The periodic monitoring would be the same as for the RDF Surface Coating Booth.

Recordkeeping and Reporting:

The recordkeeping and reporting would be the same as for the RDF Surface Coating Booth.

CAM:

This operation does not have pre-controlled potential emissions greater than any major source threshold; therefore, CAM does not apply.

High Bay Surface Coating Booth (EP – HB)

Taylor Wharton uses the high bay surface coating booth to prime, paint, and finish painting of fabricated bulk storage tanks prior to storage. This unit is subject to 40 CFR 63 Subpart M “National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products”.

Emission Standards:

The facility shall limit organic HAP emissions to no more than 0.31 kg (2.6 lb) organic HAPs per liter (gal) coating solids used during each 12 month compliance period.

40 CFR 63 Subpart M, §63.3890(b)(1)

Expected Emissions:

VOC:

The expected VOC emissions are 7.07 lbs/hr (3.61 TPY). This is based on mass balance and the maximum expected application of 1840 gallons of paint and 218 gallons of cleanup solvent during any consecutive twelve (12) month period.

Particulate Matter (PM):

The expected PM emissions are 0.711 lbs/hr (0.19 TPY). This is based on mass balance, 95% particulate filter efficiency, and the maximum expected application of 1840 gallons of paint during any consecutive twelve (12) month period.

HAP:

The expected HAP emissions are based on mass balance and the maximum expected application of 1840 gallons of paint during any consecutive twelve (12) month period.

Pollutant	Emission Rate	Emission Rate
	lb/hr	TPY
Hexane	0.03	0.01
Toluene	0.04	0.02
Xylene	1.48	0.76
Ethylbenzene	0.46	0.23
MIBK	0.02	0.01
Total	2.03	1.03

Periodic Monitoring:

The periodic monitoring would be the same as for the RDF Surface Coating Booth.

Recordkeeping and Reporting:

The recordkeeping and reporting would be the same as for the RDF Surface Coating Booth.

CAM:

This operation does not have pre-controlled potential emissions greater than any major source threshold; therefore, CAM does not apply.

Outside Tank Surface Coating Operation (EP – F-LTSC)

Taylor Wharton uses the outside tank surface coating operation to surface coat large tanks outside in a spray tunnel that is open on both ends. Emissions from this operation are fugitive. This unit is subject to 40 CFR 63 Subpart M “National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products”.

Emission Standards:

The facility shall limit organic HAP emissions to no more than 0.31 kg (2.6 lb) organic HAPs per liter (gal) coating solids used during each 12 month compliance period.

40 CFR 63 Subpart M, §63.3890(b)(1)

Expected Emissions:

VOC:

The expected VOC emissions are 7.07 lbs/hr (3.61 TPY). This is based on mass balance and the maximum expected application of 1840 gallons of paint and 218 gallons of cleanup solvent during any consecutive twelve (12) month period.

HAP:

The expected HAP emissions are based on mass balance and the maximum expected application of 1840 gallons of paint during any consecutive twelve (12) month period.

Pollutant	Emission Rate	Emission Rate
	lb/hr	TPY
Hexane	0.03	0.01
Toluene	0.04	0.02
Xylene	1.48	0.76
Ethylbenzene	0.46	0.23
MIBK	0.02	0.01
Total	2.03	1.03

Periodic Monitoring:

The periodic monitoring would be the same as for the RDF Surface Coating Booth.

Recordkeeping and Reporting:

The recordkeeping and reporting would be the same as for the RDF Surface Coating Booth.

CAM:

This operation does not have pre-controlled potential emissions greater than any major source threshold; therefore, CAM does not apply.

Repair Shop Surface Coating Booth (EP – RB1)

Taylor Wharton uses the repair shop surface coating booth to work on miscellaneous metal components and items that need additional touchups or coatings. These items are conveyed to a small surface coating spray booth. This unit is subject to 40 CFR 63 Subpart Mmmm “National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products”.

Emission Standards:

The facility shall limit organic HAP emissions to no more than 0.31 kg (2.6 lb) organic HAPs per liter (gal) coating solids used during each 12 month compliance period.

40 CFR 63 Subpart Mmmm, §63.3890(b)(1)

Expected Emissions:

VOC:

The expected VOC emissions are 0.007 lbs/hr (0.007 TPY). This is based on mass balance and the maximum expected application of 30 gallons of paint during any consecutive twelve (12) month period.

Particulate Matter (PM):

The expected PM emissions are 0.0047 lbs/hr (0.0015 TPY). This is based on mass balance, 95% particulate filter efficiency, and the maximum expected application of 30 gallons of paint during any consecutive twelve (12) month period.

HAP:

The coatings associated with this operation do not contain HAP.

Periodic Monitoring:

The periodic monitoring would be the same as for the RDF Surface Coating Booth.

Recordkeeping and Reporting:

The recordkeeping and reporting would be the same as for the RDF Surface Coating Booth.

CAM:

This operation does not have pre-controlled potential emissions greater than any major source threshold; therefore, CAM does not apply.

Wheelabrator Shot Blast Booth

Taylor Wharton uses the wheelabrator shot blast booth to remove steel “scale” and rust and generally prepare the surfaces of steel fabrications and plate components prior to further fabrication, final assembly, and painting of storage tanks.

Emissions Standards:

Particulate matter emissions from this unit shall not exceed 4.32 lb/hr, the allowable emissions rate set by Rule 335-3-4-.04. (Process Weight)

ADEM Admin. Code R. 335-3-4-.04(1)

This source shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.

ADEM Admin. Code R. 335-3-4-.01(1)

Expected Emissions:

Particulate Matter (PM):

The expected PM emissions are 0.69 lbs/hr (0.35 TPY). These emissions are based on the STAPPA/ALAPCO emissions factors.

Periodic Monitoring:

Weekly visual observations of the stack associated with this unit (while the unit is in operation) shall be conducted by personnel familiar with Method 9 of 40 CFR Part 60, Appendix A. If any visible emissions are observed, personnel certified in accordance with Method 9 of 40 CFR Part 60, Appendix A shall observe the emissions within two hours of the initial observation. If the observer certified in accordance with Method 9 of 40 CFR Part 60, Appendix A determines the emissions have opacity of 10% or greater as determined by Method 9 of 40 CFR 60, Appendix A, the facility shall investigate and initiate any necessary corrective actions within 4 hours. After any corrective actions, an additional observation by personnel certified in accordance with Method 9 of 40 CFR 60, Appendix A shall be performed in order to verify that visible emissions have been reduced.

In the event that a week goes by without the operation of this source, a weekly visual inspection shall not be required.

ADEM Admin. Code R. 335-3-16-.05(c)

Recordkeeping and Reporting:

The source shall maintain a record of all inspections performed to satisfy the requirements of periodic monitoring. This shall include all problems observed and corrective actions taken. Each record shall be maintained for a period of 5 years.

ADEM Admin. Code R. 335-3-16-.05(c)(2)

CAM:

This operation does not have pre-controlled potential emissions greater than any major source threshold; therefore, CAM does not apply.

Two (2) Natural Gas Boilers (1.2 & 1.0 MMBtu/hr)

There are no New Source Performance Standards applicable to the boilers. 40 CFR 63 Subpart DDDDD (“National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters”) was vacated in 2007, and the boilers are considered an insignificant activity in regards to Title V, therefore the boilers will be removed from the permit.

Recommendation

Based on the above analysis and pending the resolution of any comments received during the 30-day public comment period and 45 day EPA review, I recommend issuing Taylor Wharton’s Title V MSOP renewal.

Ryan Cowart
Industrial Minerals Section
Energy Branch
Air Division

January 15, 2010
Date